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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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29290	7590	02/13/2004	EXAMINER	
CARY D. PERTTUNEN 11764 RAINTREE COURT SHELBY TOWNSHIP, MI 48315			CARLSON, JEFFREY D	
			ART UNIT	PAPER NUMBER
			3622	
DATE MAILED: 02/13/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/629,013

Applicant(s)

PERTTUNEN, CARY D.

Examiner

Jeffrey D. Carlson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 10-14, 16-27 and 29-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-14, 16-27 and 29-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This action is responsive to the paper(s) filed 8/18/03.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-14, 16-27, 29-41 are rejected under 35 U.S.C. 101 for the following reasons.

- ① ■ Claims 10-41 do not set forth a concrete useful and tangible result. Applicant must set forth the step of displaying the targeted ad to the client in order to achieve such a result. Merely defining variables and cookies falls short of achieving a concrete, useful and tangible result. Likewise, "providing a targeted ad to display" only accomplishes delivery of the ad, but does not set forth the actual display of the ad.

- ② ■ Claims 36-38, 40, 41 are not within the technological arts. See below.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created

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vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

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The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele

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test used in *Toma*. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, the body of the claims do not set forth at least one computer-based feature responsible for providing a non-trivial feature of the invention.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 10-14, 16-22, 36-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claims 10 and 11, a cookie is positively provided, yet claim 10 states "cookie to store...the variables" which does not positively store the variable – such is merely functional language. Claim 11 appears to positively require the variables be stored in the cookie. It is unclear whether the variables are positively required in the provided cookie

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- Claim 21 is generally confusing. The relationship between the level number, the resource/link position and any ancestor(s) is unclear.
- Claim 36, it is unclear what "targeting" an ad requires. Determining a specific advertisement? Selecting? Delivering? Receiving? Storing? Displaying? Claim 36 is missing essential steps. The targeting an advertisement language appears to set forth the desired result of the invention, but no steps are claimed which achieve such a result.
- Claims 36, 40, 41, it is unclear what defines the acceptability of positions.
- Claim 38, it is unclear what search-identified web resources are. Applicant should set forth a positive step of search identification if he desires such a limitation.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 10, 16-23, 29-35 are rejected under 35 U.S.C. 102(a) as being anticipated by Culliss (US6078916).

Regarding claim 10, Culliss teaches a user executing a search via a web-based search engine. A web page containing organized links are returned to the user. The HTML page of links is taken to provide programming script which contains variables that

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define each of the ordered links (such as URLs, link order, link titles) that are read. The user's search activities are recorded [abstract, 5:32-67]. Culliss teaches that the search activity history can be stored as cookies [29:22-30] and that the search activity histories can affect future search result scores and subsequently, the returned results and their order [17:1-34]. In this manner, the cookies are provided before the user selects the link of a search hit. Applicant's "cookie to store" language is not believed to positively set forth the content of the cookie. Nonetheless, Culliss teaches that the links selected by the user are tracked and used to modify future search results. This inherently requires cookie-storage of the specific link information along with user search and selection history.

Regarding claim 16, 29, the list of search hits/links is taken to be a tree.

Regarding claim 17, 30, the ordered list of matches provides level numbers of the tree. The links can be considered to be all at the same level or each at different levels. Applicant's claim language is quite broad - the level(s) can be defined in a variety of ways. Further, Culliss teaches that the system scoring is based upon the relative positioning of the links within the list/tree [16:54-67].

Regarding claim 18-22, 31-35, any of the links appearing within the tree/list of results can be taken to be "internal" to the list/tree, as members of the tree/list. Alternatively, the links on the list/tree can be taken as "leaves" on the tree - no structural definition is provided by the claim. The list can simply be taken to be leaves in a list. As best understood, claims 21 and 22 are met by Culliss providing a first link



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having links below it as well as a second link having links below it as inherent in the search results list/tree.

Regarding claim 23, providing the dynamic web page results (search results based on the latest scores) inherently includes reading of the links, the link information and link order (variables) as it renders a dynamic HTML page of search results for the user.

6. As best understood, claims 36-41 are alternatively rejected under 35 U.S.C. 102(a) as being anticipated by Davis et al (US6269361). Davis et al teaches selecting/targeting advertisements/links for specific ordering of search results/positions. The linked pages are taken to be advertising at least the content of the site(s). The second link gives the user its advertising/content. Regarding claim 40, the system is capable of providing a single search result.

7. As best understood, claims 36-41 are alternatively rejected under 35 U.S.C. 102(a) as being anticipated by Culliss. Column 17 teaches providing advertising with search results based on the search term. Regarding claim 40, the system is capable of providing a single search result.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 11, 12, 14, 24, 25, 27, 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Culliss in view of Cohn et al (US6308202).

Regarding claim 11, 12, 24, 25, Culliss teaches search results and activity to be tracked using cookies. Culliss teaches to score the search hits as well as the search selections [7:10-22]. Cohn et al teaches the idea of showing ads based upon the selected link URL. It would have been obvious to one of ordinary skill at the time of the invention to have included advertising with the system of Culliss based on the selected link(s) so as to generate revenue.

Regarding claim 14, 27, it would have been obvious to one of ordinary skill at the time of the invention to have satisfied the advertising requests by reading the cookies to determine URLs.

Regarding claim 36, 38, advertising based on the URLs of the hits reads on the claims as best understood by the examiner.

10. Claims 13, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Culliss in view of Cohn et al and Merriman et al (USUS5948061). Merriman et al teaches customized advertising whereby ad impressions are tracked so that the ad can be shown the appropriate number of times during the ad campaign. It would have been obvious to one of ordinary skill at the time of the invention to have included such ad impression tracking with that of Culliss and Cohn et al. Merriman et al's tracking and

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updating of the history of the targeted ad displays is taken to update a data structure associated with the ad, based on the variable.

11. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Culliss in view of Cohn et al and Davis et al (US6269361). Davis et al teaches the idea of advertisers paying to affect the placement/order of search results. It would have been obvious to one of ordinary skill at the time of the invention to have included such a component with the scoring and ordering of Culliss' search results, so as to generate additional revenue for the site. Advertisers pay more for higher listings as taught by Davis et al.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Jain (US6480853) teaches the use of cookies to store/retrieve bookmark links from a server [col 6].
- Ortega et al (US6489968) teaches using cookies to identify a user in association with a tree structure of browsing links.
- Ryan et al (US6421675) teaches the use of cookies to identify a user at a search engine.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Carlson whose telephone number is 703-308-3402. The examiner can normally be reached on Mon-Fri 8:30-6p, (off on alternate Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on 703-305-8469. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.



Jeffrey D. Carlson  
Primary Examiner  
Art Unit 3622

jdc